



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

DATE: 10/25/2021

SUBJECT: Quality Assurance Project Plan for Tidewater Air Monitoring Evaluation Study

FROM: Verena Joerger, Physical Scientist
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TO: Kristen Murphy
VADEQ

Thank you for submitting for our review the *Quality Assurance Project Plan for Tidewater Air Monitoring Evaluation Study* (QA # 210251). Our review identified several deficiencies enumerated below that render this document inadequate in satisfying the Quality Assurance requirements for a Quality Assurance Project Plan¹. The document should be revised to address these comments and resubmitted for review and approval.

Should you have any questions, please feel free to contact me at (215) 814-2218 or Joerger.verena@epa.gov

¹ This QAPP was reviewed in accordance with the requirements outlined in EPA Requirements for Quality Assurance Project Plan, EPA QA/R5, March 2005

Comments for VADEQ TAME QAPP
Submitted by EPA R3 on 10/25/2021

Element	Element No.	Section Page	Comment
Problem Definition/background	5	31	Also include in this element of the QAPP: The project start date (can be estimate, such as "Q2 of 2022") and the duration of the study (i.e., "2 years").
Problem Definition/Background	5	34	Add specific language about two year limit of SPMs
Project/Task Description	6	35	Also include in this element of the QAPP: A timeline of project milestones (i.e., site selection, community meetings, data collection, data reporting, etc.).
Data Quality Objectives (DQOs)	7.1	42	Relate the DQOs to this specific study
Measurement Quality Objectives	7.4	43	The MQOs should be defined for this specific project. Will there be any differences in the MQOs for the sensors and FRM/FEMs?
Ambient Air Monitoring Training	8.1	46	The link for the Air Pollution Training Institute (APTI) doesn't work. Try this one: https://www3.epa.gov/ttn/apti/index.html
Routine Data Activities	9.1.1	50	Include sample custody records in bulleted list.
Network Description	10	54	This element of the QAPP will also need to contain sampling locations and a discussion on why the site location was chosen.
TAME Monitoring Network Design	10.2	55	<i>"The DEQ, with community input will select all monitoring sites accordance with the siting regulations in 40 CFR Part 58, Appendix D – Network Design Criteria for Ambient Air Quality Monitoring"</i> What about 40 CFR Part 58, Appendix E? What kinds of community input will be considered?
Sampling Methods Requirements	11	58	This element of the QAPP will also need to define the make/model of the sensors used in this study, along with a discussion on the sampling method. A SOP must be developed for field operation of the sensors and should be referenced here.
Field Activities	12.2	65	<i>"The exposed filter will be folded with the exposed sides together and inserted into a labeled envelope".</i> Reference Figure 5 here.
TSP and PM10 Methods	13.1	68	<i>"Select TSP filters will be qualitatively analyzed using a light polarizing microscope".</i> Define "select". Who will perform this analysis? Is there an SOP for this analysis? If so, it should be referenced in this QAPP.

Testing	15.1.1	101	<p><i>"The air quality sensors purchased for this study will not require any adjustment or calibration".</i></p> <p>Element 14 mentions that the sensors will be collocated with FRM/FEMs for a period of time before deployment. Include any acceptance criteria that will be used to verify the sensors are ready and acceptable for field deployment.</p>
Continuous PM10/PM2.5 Analyzers	15.2.2 .2	105	Include a similar section for the air quality sensors.
Field Data Recording	19.1	120	Add sensor-specific data management practices to this element of the QAPP.
Semi-Annual Reports	21.1.2	130	Include information in this QAPP about how data will be reported and at what frequency. Who will the data be shared with? Will there be a report completed at the end of the study? What will be the contents of the report?
Reconciliation with Data Quality Objectives	24	144	Add to this element of the QAPP: A discussion of how results will be documented and communicated, as well as how any limitations on the use of the data will be communicated.